

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Withdrawn): An information recording medium comprising a guide groove along which information is recorded/reproduced in an information recording region, the information being formed as a recorded mark in both of concave and convex portions of the guide groove, management information including address information being recorded by a wobble of the guide groove,

an offset of a reproducing signal of the recorded mark generated by the wobble of the guide groove is 5.5% or less of an amplitude of the reproducing signal.

Claim 2 (Withdrawn): An information recording medium comprising a guide groove along which information is recorded in an information recording region, the information being formed as a recorded mark in both of concave and convex portions of the guide groove, management information including address information being recorded by a wobble of the guide groove,

wherein an increase/decrease of a width of one of the concave and convex portions of the guide groove generated by the wobble of the other portion is 3% or less of one of an interval between the concave portions and an interval between the convex portions.

Claim 3 (Withdrawn): An information recording medium comprising a guide groove along which information is recorded in an information recording region, the information being formed as a recorded mark in both of concave and convex portions of the guide groove, management information including address information being recorded by a wobble of the guide groove,

wherein an amplitude of the wobble of the guide groove is 3% or less of one of an interval between the concave portions and an interval between the convex portions.

Claim 4 (Currently Amended): An information recording medium comprising a guide groove along which information is recorded in an information recording region, the information being formed as a recorded mark in both of concave and convex portions of the guide groove, management information including address information being recorded by a wobble of the guide groove,

wherein the guide groove and wobble are formed so that a signal amplitude by the wobble of the guide groove reproduced by an information recording/reproducing device which irradiates the information recording medium with a light beam to play the information recording medium is 1.6% or more and 9% or less of a maximum amplitude of a signal produced at the time of when the light beam crosses the guide groove.

Claim 5 (Withdrawn): An information recording medium comprising a guide groove along which information is recorded in an information recording region, the information being formed as a recorded mark in both of concave and convex portions of the guide groove, management information including address information being recorded by a wobble of the guide groove,

wherein an amplitude of the wobble of the guide groove is 0.52% or more of one of an interval between the concave portions and an interval between the convex portions.

Claim 6 (Canceled).

Claim 7 (Withdrawn): An information recording method for recording management information by a wobble of a guide groove using a light beam into an information recording medium comprising: a guide groove along which information is recorded in an information recording region, in which user data is recorded/reproduced with respect to both concave and convex portions of the guide groove and in which management information is recorded by the wobble of the guide groove, the method comprising:

    focusing the light beam on the information recording medium to form the guide groove in the information recording medium;

    oscillating the light beam to wobble the guide groove in a radial direction of the information recording medium;

    judging whether the wobble is 0.52% or more and 3% or less of a guide groove interval; and

    increasing an oscillating amount, when the wobble is 0.52% or less and decreasing the oscillating amount, when the wobble is 3% or more.

Claim 8 (Withdrawn): An information recording device to record management information by a wobble of a guide groove into an information recording medium comprising: a guide groove along which information is recorded in an information recording region, in which user data is recorded/reproduced with respect to both concave and convex portions of the guide groove and in which management information is recorded by the wobble of the guide groove, the device comprising:

    an optical system which focuses the light beam on the information recording medium to form the guide groove in the information recording medium;

an oscillating portion which oscillates the light beam to wobble the guide groove in a radial direction of the information recording medium; and

a controller which controls the oscillating portion so that the wobble is 0.52% or more and 3% or less of a guide groove interval.